

# **Response Summary for Comments Received on Draft Indirect Discharge Permit ID-9-0258**

## **Crowley Cheese, LLC**

February 24, 2017

The draft indirect discharge permit renewal ID-9-0258 for Crowley Cheese, LLC was placed on public notice from January 9, 2017 to February 7, 2017. During this period, public comments were received on the draft permit. These comments, and the Vermont Agency of Natural Resources' (ANR) response to these comments, are provided below. The actions taken as a result of these comments are indicated at the end of this document.

### **Wastewater Containment Comments:**

- I'm disappointed that there is no tank requirement in the draft permit.
- There is no liner in the pond. Where is EPA?
- They have stopped maintaining the pond.
- It used to be a regular pond, with frogs and such. How did they get to discharge into it?

### **ANR Response:**

This discharge was originally approved in 1971. As such, it is considered an existing system because it was in existence prior to May 17, 1986 in accordance with the Indirect Discharge Rules. The Indirect Discharge Program is a state permitting program, therefore the U.S. EPA has no jurisdiction over this discharge.

The permittee is allowed to operate the existing system providing that they comply with the Groundwater Protection Rule & Strategy and the Vermont Water Quality Standards. The permit contains additional requirements, such as the installation of at least one more monitoring well near the lagoon, to help further evaluate any impacts to groundwater or surface water quality.

### **Sprayfield Comments:**

- I don't believe that the volumes sprayed in 2015 as indicated in the Fact Sheet are right. It's a lie, there is no way they discharged two days in 2015. How can

you believe that? Why isn't the State questioning the spray volumes? No one is investigating.

- Production of cheese did not go down, so why did they only spray 2 times in 2015 and 3 times in 2014? Where did the whey go? Until 2016, there was no tank.
- Can the State see the records of cheese production? There is a 10:1 ratio of wastewater to cheese.
- How can the waste be labeled as fertilizer? It kills everything a few days after spraying.
- They are allowed to spray 701 gallons per day.
- Pumping whey onto a field in 2017 is wrong. Crowley is a great business, but they should take care of their waste.

**ANR Response:**

The permit does allow Crowley Cheese to land apply up to an average of 701 gallons per day. That does not mean that they actually land apply that amount. The monthly reports submitted to the Agency indicate that actual land application is significantly less.

With regard to the reports of only 2 or 3 spraying events per year, the Agency requested a written response from Crowley Cheese regarding this question. In a February 13, 2017 letter, Crowley Cheese indicated that, starting in late 2011, the majority of the whey has been used as pig feed. The Agency does not have any evidence to support or dispute this claim. Crowley Cheese also indicated in the letter that their cheese production was down slightly in 2013 – 2015 from that of previous years. Going forward, the new reporting requirements in the permit will provide a thorough accounting of the volume of whey and wash water actually discharged to the lagoon.

The whey and wash water contains nutrients such as nitrogen and phosphorus which are essential for plant growth. The Agency does not have any evidence that the operation of the sprayfield is killing vegetation. A site visit last summer by an Agency representative following days of land application by Crowley Cheese did not reveal any evidence of dead vegetation. In fact, the grass in the sprayfield was quite tall that day.

**Change in Ownership Comments:**

- Did they get a permit amendment for change in ownership 3-4 years ago? The company has always been Crowley Cheese but previously owned by Dick Beard and 20 shareholders.
- In the permit, if a permittee transfers ownership, you require them to raise funds to maintain and replace the system. They have not proven they have revenue to purchase a tank. The State is not enforcing that on Crowley Cheese. The tank last summer was provided by the farmer.

**ANR Response:**

The permit was amended in December 2010 for the change in ownership to Galen & Jill Jones. The company's name changed from Crowley Cheese, Inc. to Crowley Cheese, LLC. At that time, the Agency likely did not require proof of sufficient revenue to purchase a tank, if a tank was even contemplated.

**Odor Control Comments:**

- Crowley Cheese will only make stuff up for odor control.
- They only put the odor control chemical in the pond when I complain.

**ANR Response:**

The permit contains a requirement that Crowley Cheese must submit a whey and wash water management plan to the Agency for review and approval. This plan must address the control of odors from the lagoon and sprayfield. The plan must also contain a contingency plan for alternative methods of storage and disposal if odors from the lagoon or sprayfield persist at off-site locations.

The permit also contains a requirement that Crowley Cheese take appropriate measures at all times to control odors from the lagoon and sprayfield. If odors are not controlled, the Agency can require Crowley Cheese to implement the approved contingency plan for offsite disposal of the whey and wash water.

The Agency requests that the commenter document in writing the dates/times that odors are prevalent on her property. These dates/times will be compared to the daily discharge records that are now required of Crowley Cheese for any discharge to the lagoon or land application in the sprayfield.

**Enforcement Comments:**

- Did the State take enforcement action for the violations that are in the Fact Sheet?

**ANR Response:**

As stated in the Fact Sheet, the mean value for total dissolved solids exceeds the Groundwater Protection Rule & Strategy enforcement standard of 500 mg/L in groundwater around the lagoon and in the sprayfield. These two apparent exceedances are caused by two high total dissolved solids results, one at each location, from sampling that occurred on October 8, 2012 that significantly skew the mean values. Without the two high results, the mean values are well under the enforcement standard, as are the median values at each location.

The Agency has discretion when to request action for an apparent exceedance. In this case, the Agency did not take enforcement action for the two total dissolved solids results from the October 8, 2012 sampling event. The results from that sampling event were very abnormal, and not consistent with concentrations of total dissolved solids over time, which have been below standards. Total dissolved solids has a secondary groundwater quality standard, meaning that the enforcement standard is based on aesthetic concerns such as odor and taste, and not based on health risk.

**Health Concern Comments:**

- There has not been any study done to determine if the waste is non-pathogenic.
- My primary concern is breathing the air. The odors are toxic, smell terrible, and there has been no health study on breathing it. I have respiratory issues and want the air quality tested. They do that at OMYA and I want the same done here.
- I want to have my artesian well water tested twice a year.
- No consideration to my family and health.

**ANR Response:**

The Agency is not aware of any studies that have been conducted on air quality at the Crowley Cheese site. However, numerous toxic scan analyses have been conducted at another, very large cheese manufacturing facility in Vermont.

Those results have indicated that the vast majority of volatile organic compounds, semi-volatile organic compounds and other contaminants of concern analyzed for in the wastewater were not detected. The very few compounds that were detected or possibly detected were at concentrations near detection limits, well below any hazardous waste standard.

The Agency has also met with and written to Crowley Cheese about taking additional measures to assure that odors do not cross property lines, such as relocating spray nozzles further downslope and spraying only when the wind is blowing away from neighboring properties. Furthermore, new conditions have been added to the permit for the control of odors, including a requirement for submittal of a whey and wash water management plan with an off-site disposal contingency plan in case odors are not controlled.

Although it is very unlikely that any contaminants from the lagoon or sprayfield are reaching the commenter's water supply, the Agency doesn't have enough information to say for certain whether that is the case. Implementation of the updated Quality Assurance/Quality Control Plan will help in making that determination.

**Operator Comments:**

- Margaret the operator doesn't even go there.
- Who is doing the sampling? The operator is not on site.

**ANR Response:**

Margaret Dwyer has been the contracted operator for Crowley Cheese since October 2014. She performed the biannual sampling at Crowley Cheese in 2015 and 2016. She is also on-site for the annual inspection. In the future, the Agency will expect more of an on-site presence during discharge and spraying events.

**General Comments:**

- I want to go outside, have a cookout and hang out laundry. We couldn't hold a graduation party. They are taking away my quality of life.
- The permit is to protect Crowley Cheese, not to protect my family.

- The odors lower the value of my house, which is against the law. I won't be able to sell the house when I disclose the odors.
- Why does a corporation get to take away my right to fresh air? I don't want anything more than anyone else has, which is fresh air.

**ANR Response:**

The Agency agrees that everyone is entitled to fresh air. The permit contains a number of new conditions relating to the management of the whey and wash water and the control of odors from those discharges so that neighbors can have fresh air at all times.

**Actions Taken as a Result of Public Comment:**

Condition D10 has been added to the permit which requires Crowley Cheese to record on a daily basis the volume discharged to the lagoon, the volume in the lagoon, the amount of odor control agent used, the weather including wind direction on days the permittee sprays, and a notation of any odors at property lines. This information is required to be reported monthly in a new Condition D11 (an expansion and revision of former Conditions E5 and E6). With this information, the Agency will be able to better assess daily disposal activities and take follow-up measures as necessary to assure that odors are controlled.

Condition E1 has been revised to require the submittal of an updated Quality Assurance/Quality Control Plan by April 28, 2017 instead of by March 31, 2017 to give the permittee sufficient time to develop the Plan. This revision was not based on public comment.